

This Report has been cleared for submission to the Director by Programme Manager, Marie O'Connor on 27/04/2020.

Signed: Aisling Kehoe Date: 28/05/2020



OFFICE OF ENVIRONMENTAL SUSTAINABILITY

INSPECTOR'S REPORT ON AN WASTE LICENCE APPLICATION, LICENCE REGISTER NUMBER W0300-01

TO: DR. EIMEAR COTTER

FROM: SIOBHÁN EGAN

DATE: 28TH MAY 2020

Applicant: Kilsaran Concrete Unlimited Company
 CRO number: 23927 (status: normal)
 Location/address: Halverstown, Kilcullen, Kildare, R56 DD21
 Application date: 08 February 2019

Classes of activity (under Waste Management Act 1996 as amended) applied for and proposed in Recommended Decision (RD):

Principle Activity: R05 Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.
 R03 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals.
 R13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)".

Main BAT Note: EPA Guidance Note on Best Available Techniques for the Waste Sector: Landfill Activities (2011) (insofar as it relates to the backfill activities at this facility)

Activity description/background:

The applicant proposes to backfill a sand and gravel pit as a restoration scheme and to improve agricultural lands using imported inert material (described as excess soil, stones and/or broken rock) that will be recovered at the facility. The proposed annual intake of waste soil & stone from C&D activity and dredging is 1,200,000 tonnes. Stockpiling of topsoil for rehabilitation activities is part of the activity.

Additional information received: Yes;
 • 10th February 2020 (Article 14 notice): Reply 13th February 2020.

No of submissions received: None (0)

EIAR submitted: Yes 08/02/2019 NIS submitted: No

Introduction

This is an assessment of an application for a licence to carry on an activity under Part V of the Waste Management Act 1996 as amended.

Kilsaran Concrete Unlimited Company has applied to the Agency for a waste licence to recover and use 1,200,000 tonnes of imported inert materials to restore a pit created by previous extraction of sand and gravel and bring into agricultural use, and to further backfill and improve lands currently in agricultural use. The recovered material is to be composed of waste soil, stones and/or broken rock from construction and demolition activities and from dredging. The scheme also includes stockpiling of topsoil for the site rehabilitation works and to accommodate topsoil intake from major works. The activity will be carried out on a phased basis, recovering approximately 300,000 tonnes of material per annum.

The applicant is Kilsaran Concrete (trading as Kilsaran Build) and is primarily engaged in the production of materials for the construction industry. The company operates quarries, and manufactures paving and walling, products including ready-mix concrete, concrete blocks, hard core and fill materials for the Irish and UK markets as appropriate. The company also undertakes surfacing contracts for road construction, building and civil engineering works.

1. Description of activity

The site extends to c.17.5 hectares and is located at E282840 N205420, immediately to the west of the R448 Regional Road (former N9), approximately 800m west of the M9 motorway and 4.5 km to the south of Kilcullen village (Appendix 1). The entire site is comprised of lands previously used for sand and gravel extraction and part of the site is currently in agricultural use (the north-eastern part of the site). The site adjoins and shares welfare facilities with Kilsaran's existing concrete manufacturing facility to the north which continues to operate. The site is accessed through the existing Kilsaran Concrete Facility entrance located on the western side of the R448 Regional Road. The site boundary is secured by post and wire fencing and/or hedgerow and the site is surrounded by agricultural (primarily grazing) lands with residential and community development consisting of one-off housing and ribbon development along the local road network.

Existing backfilling activities (not the subject of this licence application):

Kilsaran Concrete have been operating waste recovery activities at this location under a Waste Facility Permit (WFP-KE-016-0085-01) that was granted in 2016. This provided for the recovery of 99,000 tonnes (approximately 15,000 tonnes per annum over 6 years) of inert soil and stone through placement on land and use for partial backfilling and restoration of the worked-out sand and gravel pit.

Proposed activity:

The proposed recovery facility involves the continued restoration of a pit created by previous extraction of sand and gravel. The activity involves further backfilling across the site and

improvement of lands currently in agricultural use. The application also includes the temporary storage of topsoil material for rehabilitation works.

The activity involves:

- Recovery and use of approximately 1,200,000 tonnes of imported inert natural materials from construction and demolition activities and from dredging. No more than 75,000 tonnes will be stockpiled on site at any one time (Condition 8 and Condition 1.2, *Schedule A: Limitations*). The material will be composed of waste soil, stones and/or broken rock and may contain up to 2% non-natural materials by weight, i.e., anthropogenic or man-made substances such as rubble, concrete, bricks, metal and bitumen that are non-natural to the environment from which the material was extracted (Condition 1.2, *Schedule A: Limitations*, Table A.2). The material will be used to backfill the sand and gravel pit, reinstating a landform that merges into the surrounding agricultural landscape (Figure 1).
- Stockpiling and storage of topsoil and subsoil pending re-use as cover material for final restoration of the site. No more than 36,000 tonnes of topsoil will be imported to the site and no more than 25,000 tonnes to be stockpiled on site at any one time (Condition 8). A total of 36,000 tonnes required for rehabilitation works.
- In total, no more than 300,000 tonnes of material (both soil and stone, and topsoil) per year will be imported to the site (*Schedule A: Limitations*, Table A.1.1) and no more than 100,000 tonnes (75,000 tonnes of soil and stone, 25,000 tonnes of topsoil) will be stockpiled at the site at any one time (Condition 8 and *Schedule A: Limitations* Table A.1.3).
- Separation of any construction and demolition waste (principally concrete, metal, timber, PVC pipes and plastic) inadvertently imported to site prior to removal off-site to authorised waste disposal or recovery facilities.
- A cover layer comprising 150 mm of topsoil and approximately 300 mm of subsoil will be placed over the inert materials on completion of the back-filling activities. This will then be seeded with grass in order to promote stability and minimise soil erosion and dust generation. Woodland planting is proposed for a number of areas across the site. On completion, the lands will be returned to use as grassland and will either be let to a local farmer for grazing/tillage purposes or left to be recolonised by vegetation.
- The activity will be supported by the use of existing and/or previously approved site and services infrastructure including, site office, staff welfare facilities, weighbridge (with dedicated office), wheel-wash, hardstand areas, fuel storage tanks, maintenance shed, covered waste inspection and quarantine facility. The infrastructure includes an existing septic tank and an onsite water abstraction point/ groundwater borehole servicing the facility. Further site detail is provided in Figure 2.
- The emissions will be to air as dust (diffuse) and noise. There are no discharges to water or to ground. Rainwater and run-off will percolate to ground.
- There are no proposed or existing drainage systems in place and there will be no off-site discharge of water from the site to surface water. Due to the permeability of the subsoils at the site, rainfall infiltrates rapidly to ground. No specific surface water management plan is proposed by the applicant as no washing down activities occur, while some dosing during dry weather for dust management is proposed. Water from the wheel wash to be disposed of off -site.
- Any wastes generated on site will be collected by an appropriately licenced contractor. This will include wastes from welfare facilities supporting two full time staff and visitors, and

any sludges resulting from the wheel-wash as well as any wastes collated in the quarantine area. An existing septic tank and percolation area serves the site.

- It is proposed that the following wastes (List of Waste codes) will be recovered at the facility:
 - 17 05 04 Soil and stones other than those mentioned in 17 05 03.
 - 17 05 06 Dredging spoil other than those mentioned in 17 05 05.
 - 20 02 02 Soil and stone from municipal facilities.



Figure 1. Area for backfilling also showing the original landform and ongoing block-making facility in the background. The block-making facility adjoins the site and shares welfare facilities with the site and is not subject of this licence application. Source: Siobhán Egan.



Figure 2. Site details including workshop for vehicle fuelling and maintenance with banded storage and quarantine area. Source: EPA GIS and Siobhan Egan.

2. Planning Status

Planning applications have previously been made by the applicant for the area. Details of planning applications and permissions have been provided in the application form and are summarised here:

Permission	Authority and Date	Purpose
Planning Plan File Ref. No. 18/453	Kildare County Council October 2018	Establishment of waste recovery facility, use of existing facilities, temporary stockpiling for re-use in restoration activities.
Waste Facility Permit WFP KE 16 0085 01	Kildare County Council August 2016	For partial infilling of the lands previously used for sand and gravel extraction. This development has commenced and associated infrastructure, including a wheel-wash and weighbridge with office, has been constructed under this permission.

Planning Plan File Ref. No. 15/189	Kildare County Council September 2016	The importation and recovery of inert soil and stone waste, comprising of 20,000-25,0000 tonnes per annum for a period of 4-5 years, to partially restore the former extraction and silt settlement lagoon in the southern part of the Kilsaran landholding at Halverstown. This restoration covers a period of 4-5 years.
Planning PL 09.203493	An Bord Pleanála 28 th November 2003	Upheld grant of planning in a challenge to decision by Kildare County Council made on 11 th June 2003 to grant (see below).
Planning Plan Ref No: 02/850	Kildare County Council 11 th June 2003	Granted: Sand and gravel development and associated processing on 32.4ha. The grant of planning was subsequently upheld by An Bord Pleanála on 28/11/2003 (Ref PL.09203493).
Planning Plan Ref No: O6/651	Kildare County Council	Granted: The extraction of sand and gravel with processing - crushing, washing (with associated silt disposal lagoons) and screening and all ancillary works and structures on a total site measuring 37.0 hectares (An Bord Pleanála ref 223574)
Planning Plan Ref No: 04/1109	Kildare County Council	Granted: Readymix plant at existing operation & for 32 hectares extension to existing sand and gravel operation. The application was initially refused by Kildare County Council and subsequently granted by An Bord Pleanála.

The applicant has submitted the EIAR associated with the most recent permission:

- *Environmental Impact Assessment Report: Proposed Inert Waste Recovery Facility at Halverstown Townland, Kilcullen, Co. Kildare Prepared for Kilsaran Concrete by SLR Consulting, Ref: 501-00036-00054 (March 2018)*

Having reviewed the planner's reports for previous planning permissions, it is considered that the EIAR submitted with the licence application, along with the licence application and further information received, contains adequate information to inform the Agency's assessment, and that the EISs/EIARs relating to previous planning permissions are not required for the Agency's assessment. The Agency has had regard to the reasoned conclusions reached by the planning authority in undertaking its environmental impact assessment of the activity.

3. EIA Screening

In accordance with Section 83(2A) of the EPA Act 1992, as amended/Section 40(2A) of the Waste Management Act 1996 as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 83/40(2A)(b) and 83/40(2A)(c). In accordance with the EIA Screening Determination, the Agency has determined that the activity is likely to have a significant effect on the environment, and accordingly is carrying out an assessment for the purposes of EIA.

The activity exceeds the following threshold in Schedule 5 of the Planning and Development Regulations 2001, as amended: (11) (b) 'Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.' The EIAR was submitted by the applicant in support of this licence application on 8th February 2019.

4. Assessment requirements under Waste Management Act 1996, as amended

Section 40 of the Waste Management Act 1996 as amended provides that the Agency in considering an application for a licence or the review of a licence, shall have regard to any relevant air quality management plan, water quality management plan, waste management plan, hazardous waste management plan and such other matters related to the prevention, limitation, elimination, abatement or reduction of environmental pollution. The Agency shall not grant a waste licence or revised waste licence unless it is satisfied that emissions comply with relevant emission limit values and standards prescribed. In setting such limits and standards, the Agency must ensure they are established based on the stricter of either, or both, the limits and controls required under Best Available Techniques (BAT), and those required to comply with any relevant environmental quality standard.

5. Best Available Techniques

Although the facility is not a landfill (i.e. it is a backfilling project which is a waste recovery activity, not a waste disposal activity) the applicable BAT for the activity is the Agency's *Guidance Note on Best Available Techniques for the Waste Sector: Landfill Activities (2011)*, insofar as it relates to the backfill activities at this facility.

The relevant BAT requirements are addressed through the technologies and techniques as described in the application, as well as the conditions and limits specified in the RD.

6. Emissions

The emissions resulting from the proposed activity will be the following:

- Air, as dust (diffuse)
- Noise

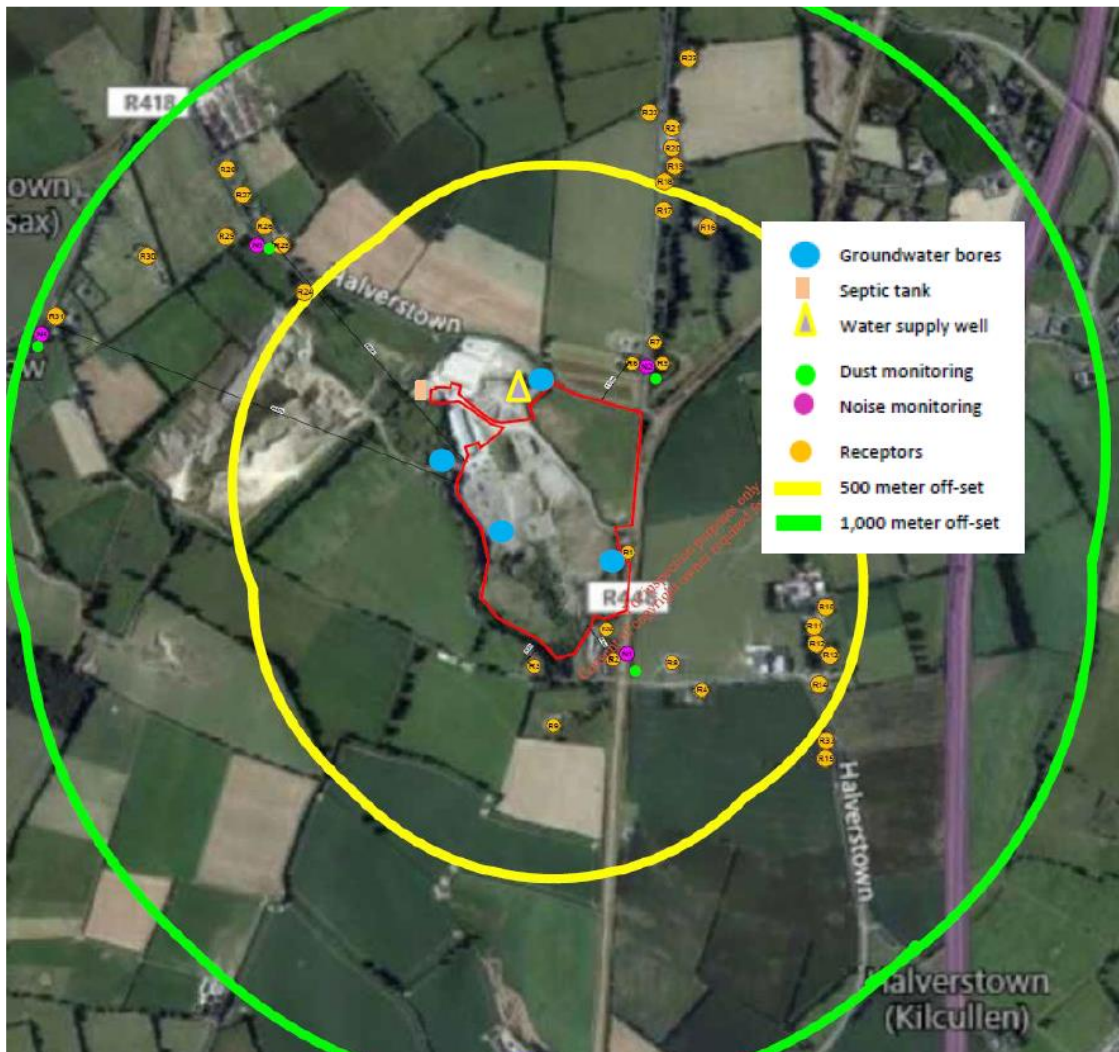
The receiving environment is an agricultural (grazing) landscape in a rural area with residential development generally consisting of one-off housing and ribbon development along the local road network. The closest residential dwellings to the application area include a dwelling located beside the site entrance, which is unoccupied and owned by the applicant, and a group of houses to the south of the boundary, the closest of which is c. 15 m from the site boundary. There is an agricultural building located to the south of the application area. A primary school is located on the L089 to the east of the R448 and is approximately 243 metres from the application area. Local receptors within a 500 metre and 1000 metre radius of the facility are detailed in the applicants EIAR (Chapter 4) and in Figure 3.

Likely significant direct and indirect effects, relevant mitigation measures and monitoring are identified in the applicant's EIAR and are addressed in this section of the assessment, as are cumulative effects. Details of monitoring station locations are provided in Figure 3.

Should emissions exceed environmental quality standards this could have implications for population and human health, biodiversity, land, soil, water, air, and climate, material assets, cultural heritage and the landscape, and the interactions between the factors listed above. Potential significant effects may also occur through accidental emissions to ground due to e.g. fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents).

In addition to the Conditions identified for emissions in this section, the RD requires that:

- No specified emission from the installation shall exceed the emission limit values set out in *Schedule B: Emission Limits* of the RD (Condition 5).
- There shall be no other emissions of environmental significance (Condition 5).
- Monitoring requirements for all emissions of environmental significance from the installation shall be carried out as set out in *Schedule C: Control & Monitoring* (Condition 6).



*Figure 3. Indicative locations of receptors and monitoring stations for Noise, Dust and Groundwater. Location of the septic tank and abstraction well are also identified.
Source: Adapted from Licence Application.*

6.1 Emissions to Air

This section addresses emissions to air from the installation and the environmental impact of those emissions.

6.1.1 Channelled Emissions to Air

There are no channelled emissions to air.

6.1.2 Fugitive Dust

In dry, windy weather conditions, the infilling and restoration activities may give rise to dust blows beyond the site boundary potentially affecting local air quality and locally important habitats located close to or on the site boundary (such as hedgerows). Dust arising from the activity have the potential to cause nuisance beyond the facility boundary causing a nuisance and/or deterioration of the local environment for the local population and their health. Chapter 8 of the applicants EIAR and Receiving Environment Report (attachment no. 7-1-3-2) in particular are relevant to fugitive dust.

Fugitive dust blows may result from:

- HGV movements over unpaved haul roads,
- soil handling / placement activities, and
- stockpiled / in-situ exposed soil.

Potential significant effects may also occur through accidental emissions to ground due to, e.g., fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents).

No compliance issues relating to fugitive dust and current operations were identified by Kildare County Council in its response to consultation (see section 13).

Site-specific dust monitoring is currently carried out at the existing waste recovery facility in compliance with Condition No. 23 of the existing planning permission for a smaller scale waste recovery facility. Dust monitoring is also required by the existing waste facility permit (Ref. No WFP-KE-16-0085-01). Details of existing dust emission levels arising at and around the existing permitted waste recovery facility are provided by the applicant (attachment no. 7-1-3-1 Compliance Report). The monitoring data provided by the applicant indicates that existing waste recovery activities at the existing facility are operating comfortably within the threshold limit for dust emissions (350 mg/m²/day).

The RD as drafted requires that dust emissions will remain below the existing threshold limit of 350 mg/m²/day (Condition 5, *Schedule B: Emission Limits*), that adequate dust control measures are employed to minimise the emission of dust at the facility (Condition 6.9) and are detailed in an Environmental Management Programme. Control measures identified by the applicant include the following:

- Water to be sprayed from a tractor drawn bowser on any dry exposed surfaces (roads and hardstand areas).
- As the level of the filled materials approaches final surface levels, the site to be seeded with grass on a phased basis, as soon as practicable after placement of cover soils (subsoil and topsoil) to minimise soil erosion and potential dust emissions.
- The area of bare or exposed soils to be kept to a minimum. If excessive dust emissions arise, consideration will be given to establishing temporary vegetation cover over exposed soil surfaces and stockpiles pending subsequent filling and restoration to final ground levels.
- All HGV's exiting the site to be routed through the existing wheel-wash facility in order to minimise transport of mud and/or fines by HGVs onto the public road network.
- Stockpiling of imported soil materials to be minimized. Soils to be placed and compacted in-situ immediately after being imported to site and end tipped. If and when temporary stockpiling of soil is required, it is to be placed as far as practicable from nearby residences.

- The amount of dust or fines carried onto the public road network to be further reduced by periodic sweeping of internal paved site roads and the existing public roads, when required.

Schedule B.5 of the RD sets a limit on ambient dust deposition at the facility boundary while Schedule C.3 requires bi-annual monitoring of ambient dust deposition. Condition 3.19 requires that all vehicles leaving the facility shall use a wheel wash. Condition 6.9 requires that site roads and other relevant areas used by vehicles and stockpiles are to be sprayed with water during dry weather to minimise dust emissions.

There are no other industries or developments in the vicinity of the facility that are likely to discharge emissions to air which would lead to likely or significant cumulative effects. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

6.1.3 Odour

The inspection, backfilling activity and storage of waste will take place outdoors. Odour is not expected to be an issue as there will be no odorous waste accepted at the facility. The activity involves the recovery of inert soil and stone from construction and demolition activity and dredged materials. As the materials being recovered at this site are not biodegradable and do not emit odorous gases, site activities will not give rise to odour nuisance. The likelihood of accidental odour emissions occurring is considered low given the waste acceptance limitations. Chapter 8 of the applicants EIAR is relevant to odour.

Potential significant effects may also occur through accidental emissions to ground due to, e.g., fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents).

No compliance issues relating to odour and current operations were identified by Kildare County Council in its response to consultation (see section 13).

The RD as drafted requires that

- In the event that any biodegradable waste being identified among imported materials, it shall be removed to the waste quarantine area pending removal off-site to a licenced waste disposal or recovery facility (Condition 6.10).

There are no other industries or developments in the vicinity of the facility that are likely to discharge emissions to air which would lead to likely or significant cumulative effects. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

6.2 Emissions to Water/Sewer/Groundwater

6.2.1 Emissions to Waters

There are no channelled emissions to waters.

The site is located within the River Barrow catchment, located in the South Eastern River Basin District. The closest surface water course is approximately 1 km to the south of the site which is the headwaters of a small stream. There are no surface water courses at the site or adjacent to it. There are no proposed or existing drainage systems in place and there will be no off-site discharge of water from the site to surface water. Chapter 8 of the applicants EIAR and Receiving Environment Report (attachment no. 7-1-3-) in particular are relevant to water.

Potential significant effects may occur through accidental emissions to ground due to e.g. fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents). No compliance issues relating to water and current operations were identified by Kildare County Council in its response to consultation (see section 13).

6.2.2 Emissions to Sewer

There are no channelled emissions to sewer.

6.2.3 Emissions to Ground/Groundwater

There are no channelled emissions to ground or to groundwater.

There are no proposed or existing drainage systems in place. Due to the permeability of the subsoils at the site, all rain which falls across the site percolates to ground and the underlying groundwater table. There are no surface water bodies within the vicinity of the site. Chapter 6 and 7 of the applicant's EIAR and Receiving Environment Report (attachment no. 7-1-3-2) are relevant to ground and groundwater. Additionally, Table 7-4 provides a summary in relation to groundwater monitoring and assessments that have been carried out at the site.

Potential significant effects may occur through accidental emissions to ground due to, e.g., fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents).

No compliance issues relating to ground/groundwater and current operations were identified by Kildare County Council in its response to consultation (see section 13).

The site is located on the Usk gravel aquifer which is classified as a Locally Important Sand/Gravel aquifer. The bedrock underlying the site is designated a Poor Aquifer. Groundwater vulnerability maps indicate that the groundwater vulnerability beneath the overall site is classified as being High (H), with a significant thickness (>3m) of unsaturated sand and gravel material above the groundwater table. The groundwater level data at the site indicates that groundwater flows at the site are to the north and south as the site is on a topographic high point. The locally important gravel aquifer has been identified as the sensitive receptor in the receiving environment.

No specific surface water management plan is proposed by the applicant as no washing down activities occur, while some dosing during dry weather for dust management is proposed.

The applicant identifies a well as the source of water for the site (a groundwater borehole abstraction) for welfare facilities. Condition 3.11 of the RD requires that all wellheads at the facility are adequately protected.

There are no other industries or developments in the vicinity of the facility that is likely to discharge emissions to ground/groundwater which would lead to likely or significant cumulative effects. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Groundwater monitoring results

Four exploratory boreholes were conducted at the site in April 2017 to identify the site geology and allow the identification and monitoring of the groundwater level at the site. Monthly groundwater monitoring has been undertaken at the site by Kilsaran since April 2017.

The applicant has provided groundwater quality monitoring results from three wells (one upgradient and two downgradient) indicating that the groundwater is generally of good quality

with levels generally below the threshold values, except for Ammonia in well GW2 and Sulphate in well GW3. Both GW2 and GW3 are downgradient wells. The Ammonia level in GW2 may reflect land use practises and in particular land-spreading in surrounding agricultural lands. Sulphate in GW3 exceeds the threshold value for groundwater and is significantly higher than the values recorded in GW1 or GW2. The value for Sulphate is below the drinking water standard which is 250mg/l (attachment no. 7-1-3-2, Appendix 7-1).

It is considered that the risk associated with the existing contamination to groundwater due to the activity is low on the basis of the following measures proposed by the applicant:

- The proposed infilling operations will be above the groundwater level; the infilling will increase the thickness of unsaturated material above the water table at the site and this is considered positive as it offers the groundwater beneath the site additional protection.
- There is no dewatering associated with the proposed development.
- The proposed restoration will use inert material only. In the event of the unintentional importation of non-inert material there is the potential to impact on groundwater quality. Mitigation measures are provided for in the RD to protect groundwater quality.

The RD requires that the licensee:

- Maintains a programme of groundwater level and quality monitoring (Condition 6.15).
- Ensures the activity does not pose a contamination risk, with particular reference to sulphate identified in previous groundwater samples (Condition 6.15.5).
- Demonstrates compliance with the Environmental Objectives (Groundwater) Regulations 2010 as amended with an annual assessment of groundwater monitoring results against the requirements of the European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended and implements any actions required within a period agreed by the Agency (Condition 6.16).
- Stores waste and materials in designated areas, protected as may be appropriate against spillage and leachate run-off (Condition 8).
- Ensures appropriate bunding for tank and drum storage areas, with routine integrity testing (Condition 3.8, Condition 6.7).
- Implements a programme for spill management – ensuring equipment is available on site before operations commence (Condition 9).
- Carries out routine inspection of the quarantine area to assess whether further management of water or runoff is required (Condition 8).

There are no other industries or developments in the vicinity of the facility that are likely to discharge emissions to ground/groundwater which would lead to likely or significant cumulative effects. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

6.2.4 Other emissions to Ground/Groundwater

Septic Tank

There is an existing septic tank and percolation area on site for the treatment of sanitary effluent.

The RD includes a standard condition which requires the applicant to provide and maintain a wastewater treatment system for the treatment of sanitary effluent. The wastewater treatment system and percolation area shall satisfy the criteria set out in the Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (≤ 10 p.e.) / Wastewater Treatment

Manual - Treatment Systems for Small Communities, Business, Leisure Centres and Hotels 1999 published by the EPA (Condition 3.20)

In the unlikely event of the septic tank failing, the impact in the percolation area would be localised and groundwater would not be impacted significantly. It is therefore considered that direct impacts as a result of sewage emissions to ground/groundwater are neither likely nor significant.

6.3 Storm water discharges

There are no storm water discharges to waters.

6.4 Noise

Noise arising from the site could have the potential to cause nuisance for those living near the activity or affect noise sensitive species near the site. No vibration is associated with the activity.

The main sources of noise at the facility include;

- movement of vehicles to and from the facility,
- dumping of loads,
- intermittent grading and compaction of soil and stone using a bulldozer and/or mechanical excavator, and
- movement of a front-end loader and HGV lorries around the facility.

Potential significant effects may also occur through accidental emissions to ground due to, e.g., fire, explosion, or spillage. This is dealt with further in section 9 (Prevention of Accidents). Chapters 4 and 10 of the EIAR and the applicants Emissions Compliance Report (attachment no. 7-1-3-1) in particular are relevant to noise and vibration.

No compliance issues relating to noise and current operations were identified by Kildare County Council in its response to consultation (see section 13).

Kilsaran Concrete operates a concrete block production facility immediately adjacent to the activity subject of this licence application. There are no other industries or developments in the vicinity of the facility. It is considered that the waste recovery activity in combination with the on-going production of concrete blocks are not likely to create noise or vibrations that would lead to likely or significant cumulative effects. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Site-specific noise monitoring is currently carried out at the existing waste recovery facility in compliance with Condition No. 22 of the existing planning permission for a smaller scale waste recovery facility (Kildare County Council Planning Ref. No. 15/189). Noise monitoring is also required by the existing waste facility permit (Ref. No WFP-KE-16-0085-01). Details of existing noise emission levels arising at and around the existing permitted waste recovery facility are provided by the applicant (attachment no. 7-1-3-1 Compliance Report). The monitoring data provided by the applicant indicates that existing waste recovery activities at the existing Halverstown facility are operating comfortably within the threshold limit for noise. The applicant considers that with implementation of mitigation measures, noise emissions will remain below the existing threshold limit of 55 dB(A) LAeq.

The applicant identifies mitigation measures for noise, including:

- Retaining existing boundary vegetation and boundary hedgerows to provide acoustic screening
- Working below surrounding ground level and stockpiled materials where practicable to provide further acoustic screening
- Infill operations will commence in the Southern part of the former pit to ensure that the lands adjoining neighbouring residential property are restored as early as possible

The RD requires that mitigation measures are in place and that noise levels attributable to the establishment and operation of the waste recovery facility will not exceed those set out in the EPA's *Guidance Note for Noise In Relation to Scheduled Activities* which states that "the noise level at sensitive locations should be kept below an L(AR, T) value of 55 dB(A) by daytime" when measured at the nearest noise sensitive location as detailed in *Schedule B.4* (Condition 6.9). Requirements for noise monitoring are detailed in *Schedule C.2*.

7. Waste generation

The activity does not produce significant quantities of waste. Wastes generated on site as part of the activity comprise of waste sludge from the wheel-wash, housekeeping in welfare facilities, surplus oils from vehicle maintenance works as well as any wastes potentially identified and contained in the quarantine area. The septic tank provides for domestic waste water generated on-site.

Only operators and haulage firms authorised under waste collection permits will be engaged to transfer these waste streams to waste disposal or recovery facilities

There are standard conditions in the RD pertaining to the storage and management of waste generated at the facility that will prevent the occurrence of possible direct and indirect negative effects.

The RD requires that:

- the management of waste generated at the facility will be in accordance with the requirements of Section 29 (2A) of the Waste Management Act as amended (Condition 8).
- accident and emergency response procedures are put in place (Condition 9).

8. Energy Efficiency and Resource Use

The operation of the facility will involve consumption of electricity and diesel fuel. Electricity will be used for lighting, heating, weighbridge, office and welfare facilities. Fuel will be used for powering machinery used for placing and compacting the imported soil and stone. Chapters 11, 12 and 13 of the applicants EIAR and attachments nos. 4-6-1 and 4-6-2 are relevant to resource use.

The estimated quantities of energy and resource use are identified in Section 4 'Activity and Capacity' (attachments nos. 4-6-2, 4-6-1) of the application.

The applicant identifies that as part of the Environmental Management Programme (attachment no. 9.1, section 9.3 application), procedures will be put in place to monitor fuel and electricity consumption and ensure that there is no unnecessary wastage arising from plant and equipment being powered up / on-stand-by / revved-up / left idling when they are not required to be. The

applicant identifies that it will consider undertaking an energy efficiency audit of the facility to identify further potential opportunities to reduce energy consumption.

The RD (Condition 7) sets out the requirements with regard to resource use and energy efficiency and provides for the efficient use of resources and energy in all site operations. This condition also requires an energy audit to be carried out and repeated at intervals as required by the Agency.

Electricity:

Electrical power is currently provided to the site via mains supply. Electricity will provide the principal source of energy for office lighting and heating and future usage is not expected to exceed current usage at 3 MWH per calendar year (attachment no. 4-6-1 of the application).

Fuels:

Material/Substance	Amount stored (tonnes)	Annual usage (tonnes)
Gas Oil, Auto/Low Sulphur Diesel	2	80
CAT Hydraulic Oil	0.5	1
Gear Oil	0.5	1

Water abstraction:

Water will be supplied from an on-site groundwater well. Proposed abstraction is not expected to exceed current usage at 5,750 m³/year.

Hazardous Materials

There is a risk of fuel spillages that could cause groundwater pollution. The RD (Condition 3.17) requires that all vehicle and machinery refuelling and maintenance is carried out in designated areas protected against spillage and run-off. All fuels and liquid chemicals must be stored in bunded areas. These measures address a number of key provisions of the Groundwater Directive (2006/118/EC), namely that hazardous substances should not be allowed to enter groundwater and will ensure compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010 as amended.

Land use

The potential direct and indirect effects on biodiversity are related to temporary loss of habitat (scrub). The applicant details the rehabilitation of hedgerows and as part of the landscape and rehabilitation plan (attachment no. 1-2, Figure NTS 4) resulting in improved habitats and agricultural lands. This is dealt with as a condition of planning.

9. Prevention of Accidents

A certain amount of accident risk is associated with the licensable activity. The risks and mitigation measures are detailed in the relevant EIAR chapters (including chapters 6, 7, 9, 10, 13 and 14) and are summarised in Section 4.73 of the EIAR.

The likelihood of accidental emissions to the receiving environment is considered low in light of the measures outlined in this section above and in light of the proposed conditions of the grant of licence.

The following areas are highlighted:

Potential accidents & measures for prevention/limitation of consequences	
<p>Potential for an accident or hazardous/emergency situation to arise from activities</p>	<p>Due to the non-hazardous and inert nature of the waste to be accepted at the facility (soil and stone), the risk of adverse effects on human beings and the environment as a result of an accident is low.</p> <p>Unplanned events and risks have been identified as:</p> <ul style="list-style-type: none"> • Instability following the placement of materials, • Spill from traffic accidents, • Flooding, • Accidental spillages or leaking of fuel or refuelling of plant and machinery, or the storage of such materials has the potential to impact on groundwater quality, • Release of suspended solids from soil and subsoil stripping, • Accidental spillage of fuel and release of fuels during refuelling, and • Accidental importation of non-inert material to site. <p>It is noted that the soil and stones being placed / recovered at this site are free of flammable materials and biodegradable waste that could create a fire or explosion risk.</p>
<p>Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the facility</p>	<p>Measures relate to avoidance, prevention and reduction include:</p> <ul style="list-style-type: none"> • Provision and maintenance of adequate bunding, • No faces or high stockpiles of material at the site which could be liable to instability, • A spill kit is kept at the refuelling area to deal with any accidental spillages at the site, • Oils and lubricants are stored on suitable spill pallets under cover in the workshop at the site, • Routine maintenance of plant and machinery is undertaken over the concrete slab adjacent to the bunded fuel tanks to minimise the risk of uncontrolled release of polluting liquids. Any non-routine servicing or maintenance would be undertaken at off-site facilities, and • Provision will also be made for temporary storage of any separated non-inert construction and demolition waste (including metal, timber, plastic etc.) in skips prior to removal off site to a licenced recovery facility. <p>In order to prevent fire at the site:</p> <ul style="list-style-type: none"> • Smoking at the application site and at the site office or canteen will be prohibited, • Any biodegradable or flammable waste identified or suspected in waste materials imported to site shall be immediately transferred to the waste quarantine area pending

Potential accidents & measures for prevention/limitation of consequences	
	<p>removal off-site to a licensed waste disposal or recovery facility, and</p> <ul style="list-style-type: none"> • Plant and equipment will be removed if they exhibit signs of overheating etc. <p>Fire extinguishers (water and foam) are provided at the site office to deal with any small outbreaks which may occur.</p>
Additional measures provided for in the RD	<p>The RD requires the licensee to:</p> <ul style="list-style-type: none"> • Implement waste acceptance procedures to prevent the acceptance of unauthorised (including contaminated) waste at the facility (Condition 8); • Employ a suitably qualified and experienced facility manager (Condition 2.1.1); • Implement a preventative maintenance programme (Condition 2.2.2); • Implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled (Condition 2.2.2); and • Put procedures in place to prevent accidents with a possible impact on the environment and to respond to emergencies so as to minimise the impact on the environment (Condition 9).

10. Cessation of Activity

The principal activity which will be undertaken at the application site is the backfilling and restoration of disturbed lands within an existing sand pit and a neighbouring agricultural field. The objective of the backfilling (using imported inert soil and stone waste from construction and demolition and dredging) is to restore the disturbed landform to something similar to that which predated the extraction activity at the site and in so doing provide an improved landform.

Following backfilling and restoration activities, the bulk of the site closure works will be completed and some minor works will be required to complete the closure. These are outlined by the applicant in attachment no. 9-2-3 of the application form and include:

- All mobile plant and equipment associated with the waste recovery activities will be removed off-site.
- Any dedicated site accommodation infrastructure and/or services (not shared with other site activities) will also be progressively decommissioned and/or removed off-site.
- Any mobile plant or equipment which is shared and also used or required to operate the adjoining concrete production facility will remain in-situ.
- Where necessary, hard standing surfaces will be broken up using a hydraulic breaker and subjected to validation testing prior to transfer off-site to authorised construction and demolition waste recovery facilities.
- A three-year programme of maintenance of planting including removal of tree guards, replacement planting etc.

Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment. In particular the RD requires that the licensee submits a Closure, Restoration and Aftercare Management Plan (CRAMP).

11. Fit & Proper Person

Technical Ability

The licensee has provided details of the qualifications, technical knowledge and experience of key personnel. The licence application also includes information on the on-site management structure. It is considered that the applicant has demonstrated the technical knowledge required.

Legal Standing

Neither the licensee nor any relevant person has relevant convictions under the Waste Management Act 1996, as amended, or under any other relevant environmental legislation.

Financial Provision/Strength

The licence category and proposed facility was assessed for the requirements of Environmental Liabilities Risk Assessment (ELRA), Closure, Restoration and Aftercare Management Plan (CRAMP) and Financial Provision (FP), in accordance with Agency guidance. Under this assessment it has been determined that ELRA, CRAMP and FP were not required.

There is 'inevitable closure' associated with the facility and as such the RD requires that:

- Condition 10.1 Decommissioning Validation Report
- Condition 10.2 Closure, Restoration and Aftercare Management Plan (CRAMP)

Fit & Proper Conclusion

The applicant can be deemed a Fit & Proper Person for the purpose of this application.

12. Submissions

There were no (0) submissions made in relation to this licence application.

13. Consultations

13.1 Cross Office Consultation

I consulted the Office of Environmental Enforcement (OEE) in relation to this activity. The OEE have no significant concerns regarding the proposed activity.

13.2 Planning Authority Consultation

Consultation responses were received from both the Planning Section and the Environment Section of Kildare County Council in response to consultation in relation to EIA as detailed in section 15.2.

While the main points raised are briefly summarised in the table below, the original responses should be referred to at all times for greater detail and expansion of particular points. The issues raised are noted and addressed in this Inspector's Report and were taken into consideration during the preparation of the Recommended Decision (RD).

Response			
1.	Name & Position: Brian O'Gorman, Administrative Officer, Environment Section	Organisation: Kildare County Council	Date received: 6th May 2020
	Issues raised: No (0) issues were raised. The Environment Section of Kildare County Council provided the following details: <i>In April 2015 Kilsaran Concrete Unlimited Company applied to the Environment Section of Kildare County Council for a Waste Facility Permit. The Waste Facility Permit application was for 99,000 tonnes of soil and stone to restore the southern section of the site.</i> <i>On the 17/08/2016 Kildare County Council issued a Waste Facility Permit Ref. No. WFP-KE-16-0085-01 to Kilsaran Concrete Unlimited Company.</i> <i>An officer from Kildare County Council has inspected the site four times a year since the date of issue. The site has been in compliance with the conditions of the Waste Facility Permit during all inspections.</i>		Agency response: The RD, as drafted, includes conditions and schedules requiring the activity to be carried out in a manner that will not cause environmental pollution.

Response			
2.	Name & Position: John O'Hara, Executive Planner	Organisation: Kildare County Council	Date received: 8 th & 14 th May 2020
	Issues raised: On 8 th May 2020, John O' Hara, Executive Planner, Kildare County Council sent a copy of the EIA in relation to the Inert Soil Waste Recovery Facility at Halverstown, as permitted under planning ref 18/453. He also sets out the planning history for the site. On 14 th May, the planning authority confirmed the previous correspondence of 8 th May.		Agency response: The RD, as drafted, includes conditions and schedules requiring the activity to be carried out in a manner that will not cause environmental pollution.

13.3 Transboundary Consultations

There were no (0) transboundary consultations undertaken as there were no transboundary impacts identified.

14. Appropriate Assessment

Appendix 2 lists the European Sites assessed, their associated qualifying interests and conservation objectives.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) within 20 kilometres of the proposed activity as identified in Appendix 2.

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will not have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

The reason for this determination is as follows:

- The ecological needs of qualifying interests of the designated sites identified are not connected with or likely to be impacted on by the proposed activity.

15. Environmental Impact Assessment

15.1 EIA Introduction

This assessment is being undertaken in accordance with the requirements of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

The application was accompanied by an Environmental Impact Assessment Report (EIAR):

- *Environmental Impact Assessment Report: Proposed Inert Waste Recovery Facility at Halverstown Townland, Kilcullen, Co. Kildare Prepared for Kilsaran Concrete by SLR Consulting, Ref: 501-00036-00054 (March 2018)*

As part of this environmental impact assessment, I have carried out an examination, analysis and evaluation of:

- all the information provided by the licensee (including the EIAR),
- information received through consultation,
- the documents associated with the assessments carried out by Kildare County Council and the issues that interact with the matters that were considered by that authority and which relate to the activity,

as well as considering any supplementary information where appropriate.

All of the documentation received was examined and I consider that the EIAR complies with the provisions of Article 5 of the 2014 EIA Directive when considered in conjunction with the additional material submitted with the application.

I am satisfied that the information contained in the EIAR has been prepared by competent experts and that the environmental effects arising as a consequence of the activity have been satisfactorily identified, described and assessed.

Having specific regard to EIA, this Inspector's report as a whole is intended to identify, describe and assess for the Agency the likely significant direct and indirect effects of the activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following environmental factors: population and human health, biodiversity, land, soil, water, air and climate, the landscape, material assets and cultural heritage.

This Inspector's report addresses the interaction between those effects and the related development. The cumulative effects, with other developments in the vicinity of the activities have also been considered, as regards the combined effects of emissions. In addition, the vulnerability of the activity to risks of major accidents and/or disasters has been considered. The mitigation measures proposed to address the range of predicted significant effects arising from the activity have been outlined. This Inspector's report provides conclusions to the Agency in relation to such effects.

There were no (0) submissions made relating to this licence application. Kildare County Council provided responses to the EIA consultation as detailed in section 15.2. A summary of these responses is set out in section 13 of this report.

I am satisfied that the public have been given early and effective opportunity to participate in the environmental decision-making process.

15.2 Consultation with Planning Authorities in relation to EIA

Consultation was carried out with Kildare County Council on 12th February 2019 and the 11th February 2020 under the relevant section Waste Management Act 1996 as amended. Contact by phone was also made on 6th March 2020 and a further reminder by email on 16th April 2020.

Kildare County Council Environment Section and Planning Section each provided separate responses. These are summarised in section 13 of this report.

15.3 Alternatives

The matter of alternatives is addressed in Chapter 3 of the EIAR (attachment no. 6-3-6). The locations available and the consideration of design layouts as well as the policy context and lack of availability of similar sites in a national context is identified.

Alternatives	Environmental effects	Main reason for choice
1. Do-Nothing	The site as it exists would not be reinstated to its former landform. Activity would cease under the current Waste Facility Permit.	Not appropriate. Surplus waste from projects will accumulate/stockpile in areas affecting business

	<p>Lost opportunity to reinstate habitats (hedgerows) and agricultural lands and to improve run-off and water retention on lands previously quarried.</p> <p>The existing shortage of recovery of waste soil and stone from construction and demolition and from dredging would be exacerbated and potentially create pollution issues.</p> <p>Potential environmental cost to additional transporting of waste to be dealt with appropriately.</p>	options and creating adverse environmental effects.
2. Greenfield site	<p>Loss of established habitats.</p> <p>Changes in landuse.</p>	<p>Not appropriate.</p> <p>Potentially greater environmental and business costs.</p>
3. Identify another site	<p>Existing lands owned by the applicant do not have the space/capacity for the activity.</p>	<p>Not appropriate.</p> <p>This alternative doesn't exist currently.</p>
4. Design layouts	<p>The best options were assessed by way of impact on local receptors.</p>	Included in current proposal.

Additionally, the applicant details the national and regional shortage of areas for soil and stone recovery, and that the activity has been on-going at this location under the current Waste Facility Permit.

15.4 Likely Significant Direct and Indirect Effects

The likely significant direct and indirect effects of the activities on the following factors as set out in Article 3 of the EIA Directive are considered in this section:

- (a) *population and human health;*
- (b) *biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;*
- (c) *land, soil, water, air and climate;*
- (d) *material assets, cultural heritage and the landscape;*
- (e) *the interaction between the factors referred to in points (a) to (d).*

While the environmental factors have been considered throughout the assessment, Table 1 summarises the sections of this report where each environmental factor has been predominantly discussed including likely effects, mitigation and monitoring.

Table 1. Environmental Factors considered as part of this assessment process

Environmental Factor	Section of this report
Population and human health	<p>Section 6: Emissions, Section 6.1.2: Air, as Dust – diffuse, Section 6.2.3: Groundwater – diffuse, Section 6.4: Noise, Section 7: Waste generation, Section 8: Energy Efficiency and Resource Use, Section 9: Prevention of Accidents, Section 15.4.1 Environmental Impact Assessment – Population and human health.</p> <p>With reference to the applicant’s EIAR – Chapter 4.</p>
Biodiversity	<p>Section 6: Emissions, Section 6.1.2: Air, as Dust – diffuse, Section 6.2.3: Groundwater – diffuse, Section 6.4: Noise, Section 9: Prevention of Accidents, Section 8: Energy Efficiency and Resource Use, Section 15.4.2 Environmental Impact Assessment – Biodiversity.</p>

	With reference to the applicant's EIAR – Chapter 5.
Land, soil, water, air and climate	Section 6: Emissions, Section 6.1.2: Air, as Dust – diffuse, Section 6.2.3: Groundwater – diffuse, Section 6.4: Noise, Section 7: Waste generation, Section 8: Energy Efficiency and Resource Use, Section 9: Prevention of Accidents, Section 15.4.3 Environmental Impact Assessment – Land, soil, water, air and climate. With reference to the applicant's EIAR – Chapters 4,6,7,8, 9 and 10, and attachment nos. 7.1.3.1, 7-1-3-2.
Material assets, cultural heritage and the landscape	Section 8: Energy Efficiency and Resource Use, Section 15.4.4 Environmental Impact Assessment – Material assets, cultural heritage and the landscape. With reference to the applicant's EIAR – Chapters 11,12 and 13 and attachment nos. 4-6-1, 4-6-2, 9.1.
Interactions between the factors above	Section 6: Emissions, Section 6.1.2: Air, as Dust – diffuse, Section 6.2.3: Groundwater – diffuse, Section 6.4: Noise, Section 7: Waste generation, Section 8: Energy Efficiency and Resource Use, Section 9: Prevention of Accidents, Section 15.4.9 Environmental Impact Assessment – Interactions. With reference to the applicant's EIAR – Chapter 15.
Vulnerability of the Project to Risks of Major Accidents and or Disasters	Section 9: Prevention of Accidents, Section 15.4.10 Environmental Impact Assessment – Vulnerability of the project to risks of Major Accidents and or Disasters. With reference to the applicant's EIAR – Chapters 6,7,9,10 and 13.

15.4.1 Population & Human Health

Identification, Description and Assessment of Effects

Population and human health are addressed in Chapter 4 of the EIAR. The Chapter identifies, describes and presents and assessment of the likely significant impacts on the environment, recommends mitigation and monitoring measures to reduce or alleviate these impacts and describes the residual impacts and conclusions.

Potential direct and indirect effects on population and human health are associated with the following emissions:

- Air, as dust (diffuse), and
- Noise

There is also the potential for accidental emissions to the environment, due to, e.g., fire, explosion, or spillages, etc. These are addressed in section 9.

Cumulative effects of the activity in relation to air, noise, water, land and soil are addressed in the sections identified (Table 1). It is considered that there is not likely to be a significant cumulative effect on population and human health from the activity and other activities/developments.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Potential effects, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusions

I have examined all the information on population and human health, provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of population and human health.

15.4.2 Biodiversity

Identification, Description and Assessment of Effects

Biodiversity is addressed in Chapter 5 of the EIAR. The Chapter identifies, describes and presents and assessment of the likely significant impacts on the environment, recommends mitigation and monitoring measures to reduce or alleviate these impacts and describes the residual impacts and conclusions. The EIAR describes the habitats and species at and in the vicinity of the installation.

Potential direct and indirect effects on biodiversity are associated with the following:

- Air emissions, as dust (diffuse),
- Noise emissions, and
- Landuse change (temporary).

The site boundary is composed of hedgerow that will be enhanced as part of the proposed activity and as part of the completion of landscaping works. Pioneer vegetation has recolonised parts of the site. The clearance of this scrub will result in temporary loss of these transient habitat types. Disturbance of soil and vehicle movement may create greater risk of spread of invasive species.

There is also the potential for accidental emissions to the environment, due to, e.g., fire, explosion, or spillages, etc. These are addressed in section 9 (Prevention of Accidents).

In addition, the applicant has:

- Submitted an Appropriate Assessment Screening Report (attachment no. 6.3.4),
- Identified the need for control of invasive species and as part of grant of planning,
- Proposed enhancement measures for biodiversity that include hedgerow enhancement and planting, and
- Proposed new landscape contours that are in keeping with surrounding landscape.

Cumulative effects of the activity in relation to air, noise, water, land and soil are addressed in the sections identified (Table 1). It is considered that there is not likely to be a significant cumulative effect on biodiversity from activity and other activities/developments.

There are no likely significant direct, indirect or cumulative negative effects identified. The results of the activity should be have a positive effect for biodiversity.

Mitigation and Monitoring

Potential effects, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Additionally, the RD requires that:

- An invasive species management plan is developed and implemented to address invasive species at the site (Condition 2.2.2.10)

Conclusions

I have examined all the information on biodiversity, provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential negative effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect negative effects in terms of biodiversity.

15.4.3 Land and Soil

Identification, Description and Assessment of Effects

Chapter 6 of the EIAR addresses Land, Soil and Geology. The Chapter identifies, describes and presents and assessment of the likely significant impacts on the environment, recommends mitigation and monitoring measures to reduce or alleviate these impacts and describes the residual impacts and conclusions.

Potential direct and indirect effects on population and human health are associated with the following emissions:

- Air, as dust (diffuse),
- Noise, and
- Landuse change.

Potential effects, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

There is also the potential for accidental emissions to the environment, due to, e.g., fire, explosion, or spillages, etc. These are addressed in section 9 (Prevention of Accidents).

It is noted that the site will be restored in keeping with the landscape character of the locality, resulting in enhanced hedgerow and enhanced agricultural (grazing) lands.

Cumulative effects of the activity in relation to air, noise, water, land and soil are addressed in the sections identified (Table 1). It is considered that there is not likely to be a significant cumulative effect on land and soil from activity and other activities/developments.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Potential effects, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusion

I have examined all the information on land and soil provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed

and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on land and soil.

15.4.4 Water (including Waste Water, Emissions to Sewer, Storm Water, Emissions to Ground etc)

Identification, Description and Assessment of Effects

The potential direct and indirect effects on water, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Mitigation and Monitoring

The potential direct and indirect effects on water, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusions

I have examined all the information on water (including Emissions to Ground) provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on water.

15.4.5 Noise

Identification, Description and Assessment of Effects

The potential direct and indirect effects of noise, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Mitigation and Monitoring

The potential direct and indirect effects of noise, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusions

I have examined all the information on noise provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of on noise and vibration.

15.4.6 Air (including Dust and Odour)

Identification, Description and Assessment of Effects

The potential direct and indirect effects on air, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Mitigation and Monitoring

The potential direct and indirect effects on air, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusions

I have examined all the information on Air (including Dust and Odour) provided by the licensee/applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Air (in particular Dust and Odour).

15.4.7 Climate

Identification, Description and Assessment of Effects

Chapter 9 of the EIAR addresses Climatic Factors. Climate change is a significant global issue which affects weather and environmental conditions (air, water and soil) which consequently affects population and human health, material assets, cultural heritage, the landscape and biodiversity. Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities.

The potential direct and indirect effects on climate are associated with the proposed activity relate to the operation of heavy goods vehicles (HGVs) bringing and collecting waste to and from the facility that will generate exhaust gases with greenhouse gas potential. Also, the operation of vehicles and machines in the soil recovery facility will generate exhaust gases with greenhouse gas potential.

With regard to reducing the climate impact of the facility, the RD requires an energy efficiency audit and an assessment of resource use efficiency to be undertaken in accordance with Condition 7.

Given the small quantity of climate altering substances that could be released from the activity, in a national context, I consider that the impact of any emissions from the activity on climatic considerations should be minimal.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

The potential direct and indirect effects on climate, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

Conclusions

I have examined all the information on climatic factors provided by the applicant, received through consultations, written submissions, as well as considering any supplementary

information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of climate.

15.4.8 Material Assets, Cultural Heritage and the Landscape

Identification, Description and Assessment of Effects

Chapters 11, 12 and 13 of the EIAR address Material Assets, Cultural Heritage and the Landscape. The potential direct and indirect effects on material assets are the changes in land use and landscape while the use of natural resources by the activity will not be significant.

The potential direct and indirect effects of the activity, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

No significant cumulative effects on material assets have been identified

Material assets such as roads and traffic and built services are dealt with in the decision of the Planning Authority to grant permission for the development and are not controlled by the Agency. The Planning Authority has considered the effect to be acceptable.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Cultural heritage. Any loss of archaeological or architectural heritage could impact negatively on human beings. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on site and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Landscape. Any change to landscape could impact negatively on human beings. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on site and are not controlled by the Agency. The planning authority has considered the effects to be acceptable.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

The potential direct and indirect effects on material assets, cultural heritage and landscape, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1.

The Recommended Decision does not propose to include any additional mitigation measures in relation to material assets, cultural heritage and the landscape.

Material Assets, Cultural Heritage and Landscape Conclusions

I have examined all the information on Material Assets provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the

activity is not likely to have any unacceptable direct or indirect effects in terms of Material Assets, Cultural Heritage and Landscape.

15.4.9 Interactions Between Environmental Factors

Interactions of effects are considered in Chapter 15 of the EIAR. The interaction between human beings, flora and fauna, soil, water, air, climate, landscape, material assets, cultural heritage and the interaction of the likely effects are identified throughout this report.

The interaction between factors as a result of the activity are summarised below:

	Population and human health	Biodiversity	Land, soil, water, air and climate	Material assets, cultural heritage and the landscape
Population and human health		✓	✓	✓
Biodiversity			✓	✓
Land, soil, water, air and climate				✓
Material assets, cultural heritage and the landscape				

Conclusions

I have considered the interaction between population and human health, biodiversity, land, soil, water, air, climate, landscape, material assets, cultural heritage and the interaction of the likely effects identified throughout this report. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of the interaction between the foregoing environmental factors.

15.4.10 Vulnerability of the Project to Risks of Major Accidents and/or Disasters

The EIAR describes the expected effects deriving from the vulnerability of the activity to risks of major accidents and/or disasters that are relevant to the activity. This is dealt with in Chapter 15 of the EIAR. The risks of accidents associated with the activity are dealt with in section 9 (Prevention of Accidents) of this report.

The vulnerability of the facility to natural disasters and unplanned events has been examined. Climate change impacts such as heat waves, droughts, extreme rainfall, storms and winds, landslides and rising sea levels could impact negatively on populations and human health, biodiversity, land, soil, water, air material assets, cultural heritage and landscape. The EIAR states that the vulnerability of the proposed development to accidents, unplanned events or natural disasters is relatively limited owing to the relatively simple nature of the development works, the established nature of the techniques and procedures to be followed, the material to be handled on site and the relatively rural location of the proposed works.

Mitigation and Monitoring

Potential effects, mitigation measures and monitoring are dealt with in this assessment as detailed in Table 1. No further mitigation measures relating to vulnerability have been proposed in the RD.

Conclusions

I have examined all the information on major accidents and/or disasters provided by the applicant, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Decision. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of major accidents and/or disasters.

15.5 Reasoned Conclusion on the significant effects

Having regard to the examination of environmental information contained above, and in particular to the content of the EIAR and supplementary information provided by the applicant, and the submissions from the planning authority, and third party in the course of the application, it is considered that the significant direct and indirect effects of the activities on the environment are as follows:

- Fugitive dust emissions,
- Noise emissions, and
- Accidental leakages or spills.

Having assessed those potential effects, the Agency has concluded as follows:

- Fugitive dust emissions will be mitigated through: imposing dust deposition values and implementing control measures,
- Noise emissions will be mitigated through: imposing noise limits at noise sensitive locations, and
- Accidental leakages or spills will be mitigated through inspection and maintenance of bunds, and accident and emergency requirements specified in the RD.

Having regard to the effects (and interactions) identified, described and assessed throughout this report, I consider that the monitoring, mitigation and preventative measures proposed will enable the activity to operate without causing environmental pollution, subject to compliance with the RD.

Accordingly, if the activity is carried out in accordance with the RD and the conditions attached, the operation of the activity will not cause environmental pollution. The conditions of the RD and the mitigation measures will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

16. EPA Charges

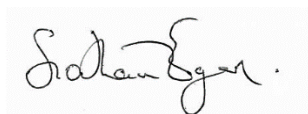
The annual enforcement charge recommended in the RD is €5,088 which reflects the anticipated enforcement effort required and the cost of monitoring.

17. Recommendation

The RD specifies the necessary measures to provide that the facility shall be operated in accordance with the requirements of Section 40(4) of the Waste Management Act 1996 as amended and has regard to the AA Screening and EIA. The RD gives effect to the requirements of the Waste Management Act 1996 as amended and has regard to submissions made.

I recommend that a Proposed Determination be issued subject to the conditions and for the reasons as drafted in the RD.

Signed

A handwritten signature in black ink, appearing to read 'Siobhán Egan', is written over a light grey rectangular background.

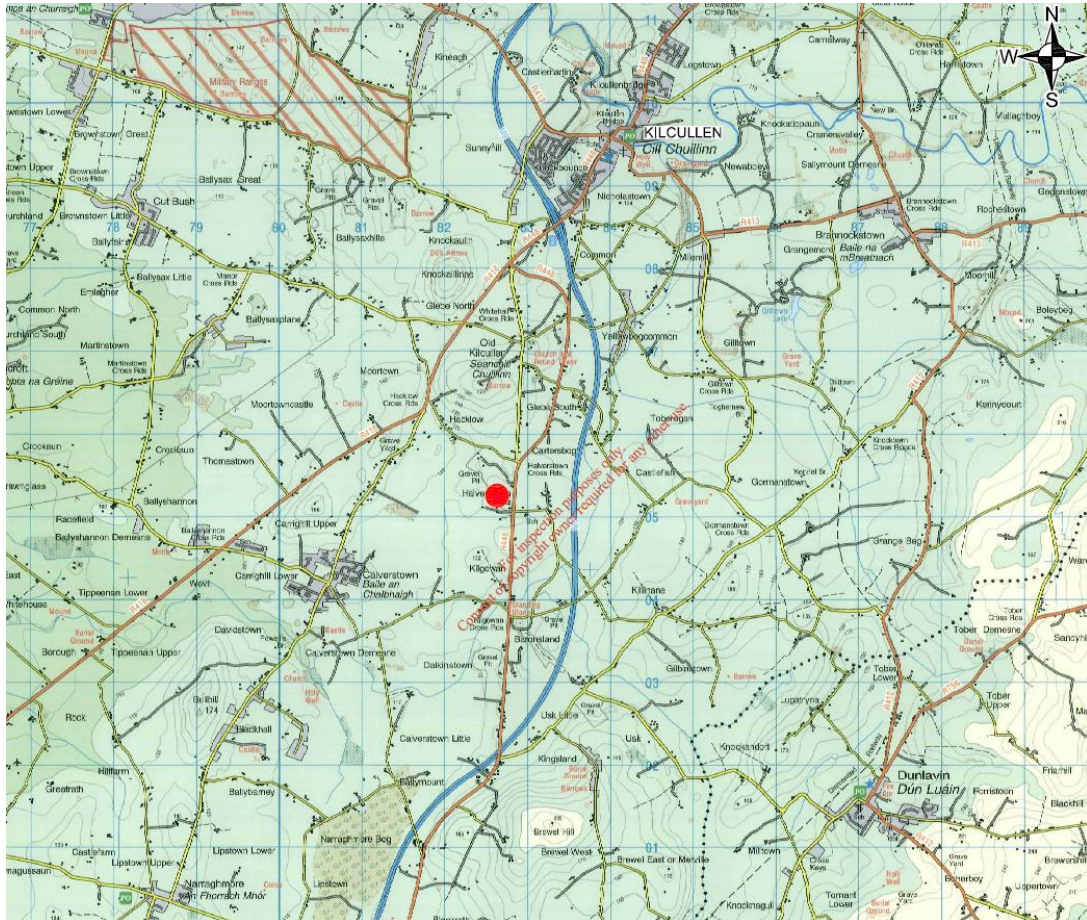
Siobhán Egan
Inspector, Office of Environmental Sustainability

Procedural Note

In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Act 1996 as amended, as soon as may be after the expiration of the appropriate period.

Appendices

Appendix 1 Site Location



Source: EPA GIS

Appendix 2 Appropriate Assessment

List of European Sites assessed, their associated qualifying interests and conservation objectives.

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives
002162	River Barrow and River Nore SAC	<p>Habitats</p> <p>1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1170 Reefs 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 4030 European dry heaths 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 Petrifying springs with tufa formation (Cratoneurion)* 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)*</p> <p>Species</p> <p>1029 Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 1016 Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>) 1355 Otter (<i>Lutra lutra</i>) 1092 White-clawed Crayfish</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf</p> <p>NPWS (2011) Conservation Objectives: River Barrow and River Nore SAC 002162. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives
		<p>(<i>Austropotamobius pallipes</i>) 1106 Salmon (<i>Salmo salar</i>) 1421 Killarney Fern (<i>Trichomanes speciosum</i>) 1103 Twaite Shad (<i>Alosa fallax fallax</i>) 1990 Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) 1095 Sea Lamprey (<i>Petromyzon marinus</i>) 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1099 River Lamprey (<i>Lampetra fluviatilis</i>)</p>	
000396	Pollardstown Fen SAC	<p>Habitats 7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>* 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)* 7230 Alkaline fens</p> <p>Species 1014 Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) 1013 Geyer's Whorl Snail (<i>Vertigo geyeri</i>) 1016 Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000396.pdf</p> <p>NPWS (2018) Conservation objectives for Pollardstown Fen SAC [000396]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.</p>
000781	Slaney River Valley SAC	<p>Habitats 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1330 Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles 91E0 Alluvial forests</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf</p> <p>NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives
		<p>with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*</p> <p>Species 1365 Harbour Seal (<i>Phoca vitulina</i>) 1355 Otter (<i>Lutra lutra</i>) 1103 Twaité Shad (<i>Alosa fallax fallax</i>) 1106 Salmon (<i>Salmo salar</i>) 1099 River Lamprey (<i>Lampetra fluviatilis</i>) 1029 Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1095 Sea Lamprey (<i>Petromyzon marinus</i>)</p>	
002331	Mouds Bog SAC	<p>Habitats 7110 Active raised bogs* 7120 Degraded raised bogs still capable of natural regeneration 7150 Depressions on peat substrates of the Rhynchosporion</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002331.pdf</p> <p>NPWS (2015) Conservation Objectives: Mouds Bog SAC 002331. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>
002122	Wicklow Mountains SAC	<p>Habitats 3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> 4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i> 6230 Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002122.pdf</p> <p>NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives
		<p>the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</p> <p>Species 1355 Otter (<i>Lutra lutra</i>)</p>	
000397	Red Bog, Kildare SAC	<p>Habitats 7140 Transition mires and quaking bogs</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000397.pdf</p> <p>NPWS (2019) Conservation Objectives: Red Bog, Kildare SAC 000397. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.</p>
001387	Ballynafagh Lake SAC	<p>Habitats 7230 Alkaline fens</p> <p>Species 1065 Marsh Fritillary (<i>Euphydryas aurinia</i>) 1016 Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001387.pdf</p> <p>NPWS (2018) Conservation objectives for Ballynafagh Lake SAC [001387]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.</p>
004063	Poulaphouca Reservoir SPA	<p>Birds A043 Greylag Goose (<i>Anser anser</i>) A183 Lesser Black-backed Gull (<i>Larus fuscus</i>)</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004063.pdf</p> <p>NPWS (2018) Conservation objectives for Poulaphouca Reservoir SPA [004063]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.</p>
004040	Wicklow Mountains SPA	<p>Birds A098 Merlin (<i>Falco columbarius</i>) A103 Peregrine (<i>Falco peregrinus</i>)</p>	<p>http://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004040.pdf</p> <p>NPWS (2018) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.</p>

Appendix 3 Relevant Legislation

The following European instruments are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Decision.
Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU)
Habitats Directive (92/43/EEC) & Birds Directive (79/409/EC)
Water Framework Directive [2000/60/EC]
Waste Framework Directive (2008/98/EC)
Energy Efficiency Directive (2012/27/EU).